IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Bruno Jandasek et al.

Serial No.: 09/682,701

Filed: October 8, 2001

Group Art Unit: 3621

Examiner: J. Winter

For: **COMPUTER-IMPLEMENTED METHOD AND SYSTEM FOR SUPPORTING PRICE NEGOTIATIONS**

Attorney Docket No.: 81047863 / FMC 1360 PUS

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an Appeal Brief from the final rejection of claims 1-16 and 19-23 of the Office Action mailed on October 24, 2005 for the above-identified patent application. The Applicant has filed a Notice of Appeal concurrently herewith.

I. REAL PARTY IN INTEREST

The real party in interest is Ford Global Technologies L.L.C. having a place of business at One Parklane Boulevard, Suite 600, Parklane Towers East, Dearborn, MI 48126, as set forth in the merger documents recorded U.S. Patent and Trademark Office on April 22, 2003 at Reel 013987/Frame 0838.

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8		
I hereby certify that this paper, including all enclosures referred to herein, is being deposited with the United States Postal Service as first-class mail, postage pre-paid, in an envelope addressed to: Mail Stop AF, Commissioner for Patents, U.S. Patent & Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 on:		
December 23, 2005	John S. LeRoy	
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II. RELATED APPEALS AND INTERFERENCES

None.

III. STATUS OF CLAIMS

Claims 1-16 and 19-23 are pending in this application. These claims have been rejected and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments were filed after the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Three independent claims are involved in this appeal, claims 1, 12 and 19.

Independent claim 1 is directed toward a computer system for generating a cost estimate. A computing device (e.g. computer 122 illustrated in Figure 10) receives input specifying an item to add to a cost estimate. (Paragraphs 31 and 32, with reference to Figure 1.) The computing device automatically adds a price associated with the item to the cost estimate. (Paragraphs 40, 49-54 with reference to Figures 3a and 3b.) The computing device then outputs a "value chain" for the item that displays the constituent components of the item by supply tier. (Paragraphs 37 and 41, with reference to Figure 3a.) The value chain includes an image of each component and its respective burden. (Paragraphs 37-40, with reference to Figures 3a and 3b.)

Independent claim 12 is a computer implemented method for generating a cost estimate. The method includes receiving input at a computing device (e.g. computer 122 illustrated in Figure 10) specifying an item to add to a cost estimate. (Paragraphs 31 and 32, with reference to Figure 1.) The computing device automatically adds a price associated with the item to the cost estimate. (Paragraphs 40, 49-54 with reference to Figures 3a and 3b.) The computing device then outputs a "value chain" for the item that displays the constituent components of the item by supply tier. (Paragraphs 37 and 41, with reference to Figure 3a.)

The value chain includes an image of each component and its respective burden. (Paragraphs 37-40, with reference to Figures 3a and 3b.)

Independent claim 19 recites a computer <u>system</u> for generating a cost estimate, but the components of the system are recited in means-plus-function format pursuant to 36 U.S.C. 112(6). A means for specifying an item to add to the estimate (e.g. GUI 10 illustrated in Figure 1) is provided at a computing device (e.g. computer 122 illustrated in Figure 10). The computing device automatically adds a price associated with the item to the cost estimate. (Paragraphs 40, 49-54 with reference to Figures 3a and 3b.) A means is then provided for outputting a "value chain" for the item at the computing device, wherein the constituent components of the item are displayed by supply chain tier. (e.g. Figure 3a.) The display includes an image of each component and its respective burden. (e.g. Figures 3a, 3b and 4.)

VI. <u>GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL</u>

Claims 1-16 and 19-23 (all pending claims) stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Evans et al. (U.S. Patent No. 6,775,647) in view of Foley (U.S. Patent No. 5,249,120).

VII. <u>ARGUMENT</u>

The examiner has not established a *prima facie* case of obviousness. More specifically, neither the Evans nor the Foley references teach or suggest outputting or otherwise displaying a value chain for an item comprising a display of the item's component parts *organized by supply tier*, each part including an associated image and burden information. An example embodiment of this aspect of the invention is illustrated in Figures 3a and 3b. This limitation is recited in each independent claim and, as explained in the summary of the invention (Paragraph 8), enables an important objective of the present invention:
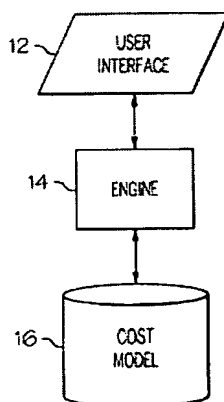
> One object of the present invention is to provide a system and method for generating a buyer's cost estimate wherein the buyer is able to "drill down" into the supply chain for a particular estimate to view descriptive and pricing information associated

with subassemblies and individual components which compose
the overall product or system that is the subject of the estimate.
This object is advantageous during pricing negotiations because
it allows a negotiator/user to easily break down estimate-level
costing information into its constituent components by supply
chain.   Having this ability provides the negotiator with
comprehensive information regarding the product or system
supply chain and thereby facilitates the identification and
explanation of cost discrepancies between the supplier's quote
and the buyer's estimate during pricing negotiations.

On page 3 of the final action, the examiner contends that this aspect of the
pending claims is taught by Evans at col. 7, lines 19-29. That passage of Evans states:

A cost model 16 is then built from a process-oriented foundation
using regression analysis techniques based on the eighteen points
in the database. For each possible selection, the cost is
assembled as a summation of the appropriate database values.
The size associated with the design points is the nominal size of
the parts, preferably allowing a variation from this nominal size
(e.g., +/-20%) utilizing a power curve equation for diffuser cost
as a function of diameter. A similar algorithm also adjusts the
part weight as a function of the diameter. Accordingly, a
process-oriented approach is used to generate a cost model 16
for a family of parts.

"Cost model 16" is illustrated in Figure 1 of Evans as a database. Figure 1 is
reproduced below:

The examiner also makes reference to Figure 16 of Evans. But Figure 16 merely illustrates database contents, not a "value chain for at least one item selected by the computing device based on one or more constituent component(s) of the item(s) and supply tier wherein the value chain includes an image and burden information for the at least one item and each constituent component" such as the example illustrated in Figure 3 of the application on appeal. Regardless of the contents of the database describes in Evans, the information is not "output" such that a user can distinguish components according to supply tier. Indeed, Evans makes no reference to a supply tier whatsoever, let alone arranging a component-by-component value chain organized by supply tier as each independent claim recites.

As explained in columns 5-7, Evans discloses a process-oriented estimating tool that is driven by manufacturing process considerations associated with the particular design of a part, referred to as "design points." Design points include the manufacturing process (e.g. investment casting, turning, forging, etc.), weight, size, shape, cross-sectional area, center of gravity, volume, etc. The sequence of the manufacturing operations necessary to fabricate the part is also taken into account. But Evans simply has nothing to do with component-based cost estimating for assembly items broken down by supply tier. Evans cannot assist a price negotiator in determining constituent supply tier costs associated with components of an assembled item — an express objective of the present invention.

Accordingly, the examiner has failed to establish a *prima facie* case of obviousness (MPEP 2142-2144) with respect to independent claims 1, 12 and 19. Similarly, "supply tier" aspects of the applicants' invention are also recited in dependent claims 2 ("the embedded value chain is illustrated *by supplier tier*"), claim 7 ("*supplier's* cost estimate format"), claim 13 ("the embedded value chain is illustrated *by supplier tier*"), claim 16 ("*supplier's* cost estimate format"), and claim 20 ("*supplier's* cost estimate format"). The Evans and Foley reference do not teach or suggest any of these limitations.

The Evans and Foley references also fail to teach or suggest "embedded value chain" aspect of the invention recited in dependent claims 2 and 13, and functionality for reducing and expanding a scope for the value chain as recited in dependent claims 3, 14, 21 and 22. The Evans reference merely teaches a static summary of manufacturing cost for particular parts or assemblies.

For these pending claims, the examiner cites Evans col. 2, lines 8-14 and Figures 2 and 12. But these teachings of Evans do not disclose the claimed subject matter. Figure 2 is a flow chart relating to the overall cost estimating process of Evans, and Figure 12 is a computer screen describing a turning operation for a workpiece, as descried at col. 6, lines 43-51. Evans col. 2, lines 8-14 merely states:

> Another aspect of the present invention is a method for estimating the manufacturing costs for a part design. A part design having advanced hardware is received. The manufacturing cost for the part design is estimated using a process-oriented approach. Using this method, the cost impact for a part design can be assessed. The manufacturing cost for part design is estimated.

This passage simply does not teach the "embedded value chain" aspect of the invention recited in dependent claims 2 and 13, and functionality for reducing and expanding a scope for the value chain as recited in dependent claims 3, 14, 21 and 22. The examiner's rejection in this regard is unwarranted.

The remaining dependent claim are patentable at least because they depend from proper independent claims, for the reasons stated above. MPEP 2143.03
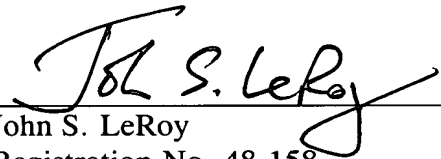
For the above reasons, the applicants respectfully request that the examiner's final rejection of the pending claims be vacated.

The fee of $500 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2), as well as any additional fees or credits, should be applied to Deposit Account 06-1510 (Ford Global Technologies, Inc.). A duplicate of this page is enclosed for this purpose.

Respectfully submitted,

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Date: <u>December 23, 2005</u>

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Enclosure - Appendices

VIII. CLAIMS APPENDIX

1.   A computer system for generating a cost estimate, the computer system configured to:

receive input at a computing device specifying at least one item to add to a cost estimate wherein the computing device automatically adds a burden associated with the at least one item to the cost estimate; and

output from the computing device a first value chain for the at least one item selected by the computing device based on one or more constituent component(s) of the item(s) and supply tier wherein the value chain includes an image and burden information for the at least one item and each constituent component.

2.   The computer system of claim 1 additionally configured to output an embedded value chain associated with an item displayed in the first value chain wherein the embedded value chain is illustrated by supplier tier and includes an image and burden information for at least one item within the embedded value chain.

3.   The computer system of claim 1 additionally configured to expand and decrease a level of detail for the burden information associated with the at least one item.

4.   The computer system of claim 1 wherein the burden information associated with the at least one item includes design cost information.

5.   The computer system of claim 1 wherein the burden information associated with the at least one item includes controls cost information.

6.   The computer system of claim 1 additionally configured to receive input defining a labor rate structure used in calculating burden information for the cost estimate.

7.   The computer system of claim 1 additionally configured to output the cost estimate in a format similar to a supplier's cost estimate format.

8.   The computer system of claim 1 wherein the cost burdens associated with the items included in the cost estimate and value chain are populated based on a database of cost burdens.

9.   The computer system of claim 8 wherein the cost burdens maintained within the database are globally updated based on an index value which reflects fluctuations in market pricing for items included in the database.

10.   The computer system of claim 9 wherein the index is calculated based on price fluctuations experienced in a subset of items generally representative of other items maintained in the database.

11.   The computer system of claim 8 wherein the database of cost burdens include negotiated, best-in-class and off-the-shelf costs for at least one item.

12.   A computer-implemented method for generating a cost estimate, the method comprising:

receiving input at a computing device specifying at least one item to add to a cost estimate wherein the computing device automatically adds a burden associated with the at least one item to the cost estimate; and

outputting from the computing device a first value chain for the at least one item selected by the computing device based on one or more constituent component(s) of the item and corresponding supply tier wherein the value chain includes an image and burden information for the at least one item and each constituent component.

13.   The computer-implemented method of claim 12 further comprising outputting an embedded value chain associated with an item displayed in the first value chain wherein the embedded value chain is illustrated by supplier tier and includes an image and burden information for at least one item within the embedded value chain.

14.   The computer-implemented method of claim 12 further comprising expanding and decreasing a level of detail for the burden information associated with the at least one item.

15.   The computer-implemented method of claim 12 additionally comprising globally adjusting the burden information based on an index value which reflects fluctuations in market pricing for the at least one item.

16.   The computer-implemented method of claim 12 further comprising outputting the cost estimate in a format similar to a supplier's cost estimate format.

19.   A computer system for generating a cost estimate, the system comprising:

a means for specifying at a computing device at least one item to add to a cost estimate wherein the computing device automatically adds a burden associated with the at least one item to the cost estimate; and

a means for outputting from the computing device a value chain for the at least one item selected by the computing device based on one or more constituent component(s) of the item and corresponding supply tier wherein the value chain includes an image and burden information for the at least one item and its constituent component(s).

20.   The computer system of claim 19 additionally comprising a means for outputting the cost estimate in a format similar to a supplier's cost estimate format.

21.   The computer system of claim 19 additionally comprising a means for reducing and expanding a scope for the value chain.

22.   The computer system of claim 19 additionally comprising:

a means for outputting from the computing device a plurality of burdens associated with the at least one item; and

a means for expanding and reducing a level of detail in which the plurality of burdens are output.

23.   The computer system of claim 22 additionally comprising a means for globally adjusting the value of the plurality of cost burdens based on an index value which reflects fluctuations in market pricing.
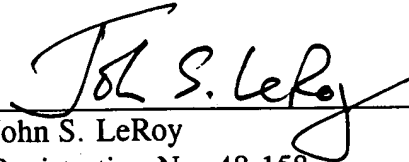
IX. EVIDENCE APPENDIX

None

X. <u>RELATED PROCEEDINGS APPENDIX</u>

None

The fee of $500 as applicable under the provisions of 37 C.F.R. § 41.20(b)(2), as well as any additional fees or credits, should be applied to Deposit Account 06-1510 (Ford Global Technologies, Inc.). A duplicate of this page is enclosed for this purpose.

Respectfully submitted,

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Appendices